CoRE: Problem Details

May 10th (Wednesday), 14:00-15:30 UTC

Problem Details:
Concise equivalent of RFC 7807(bis)
example (RFC 7807)

```json
{
    "type": "https://example.com/probs/out-of-credit",
    "title": "You do not have enough credit.",
    "detail": "Your current balance is 30, but that costs 50.",
    "instance": "/account/12345/msgs/abc",
    "balance": 30,
    "accounts": ["/account/12345",
                  "/account/67890"]
}
```
Concise version in progress until July 2020
Waiting for completion of CoRAL

Problem: 3GPP needs this **now** (June)
→ draft-ietf-core-problem-details-03 (2022-05-06)
"unbundled" approach (Thomas Fossati)

Do not mirror 7807's "type"
Add a global registry for custom problem details entries
(works best if these are maps as well)

A bit like CWT
Combining multiple custom problem details entries:
~ Multiple inheritance
example (unbundled)

```
{
    /no problem type given /
    -1 /title/: "You do not have enough credit.",
    -2 /detail/: "Your current balance is 30, but that costs 50.",
    -3 /instance/: "/account/12345msgs/abc",
    4711 /example.com out-of-credit custom problem detail key/ : {
        0 /out-of-credit-balance/: 30,
        1 /available-accounts/: ["/account/12345",
                                "/account/67890"]
    /0 and 1 are internal to example.com's 4711;
    they don't need registering /
}

} /nesting another map /
```
{ / no problem type given / 
  -1 /title/: "You do not have enough credit.",
  -2 /detail/: "Your current balance is 30, but that costs 50.",
  -3 /instance/: "/account/12345msgs/abc",
  "tag:example.com,2022:out-of-credit" : { 
    0 /out-of-credit-balance/: 30,
    1 /available-accounts/: ["/account/12345",
                             "/account/67890"]
  / 0 and 1 are internal to example.com's 2022:out-of-credit;
   they don't need registering /
  }
  / look, ma, no registering /
}
"You do not have enough credit.",
"Your current balance is 30, but that costs 50.",
"http://example.com/account/msgs/abc",
"http://example.com/account/pd": {
  0 /out-of-credit-balance/: 30,
  1 /available-accounts/: ["/account/12345",
                           "/account/67890"]
},
"http://example.com/common/pd": {
  0 /pid/: 24153,
  1 /process name/: "acctd",
}

/ composition example /
tunneling

Register CPD 7807 as:

tunnel-7807 = {
  ? &(type: 0) => ~uri
  ? &(status: 1) => 0..999
  * text => any
}

(inverse direction waiting for 7807bis, probably with some base64-encoded CBOR)
Tag 38

Tag 38: registered to do:

38(["en", "Hello"])

Missing out on base-direction (ltr/rtl)!

38(["he", "שלום", true])

https://www.w3.org/International/questions/qa-direction-from-language.html
https://www.w3.org/TR/international-specs/#text_direction
Tag 38 update proposal:

(1) define new tag for direction

(2a) define new tag "N38" like below, similar to 264 vs 4

(2b) fix up 38 to be like below

tag38 = #6.38([tag38-ltag, text, ?tag38-direction])
tag38-ltag = text .abnf ("Language-Tag" .det RFC5646)
tag38-direction = &(ltr: false, rtl: true)

RFC5646 = 'Language-Tag = langtag ; normal language tags

/ privateuse ; private use tag

... / legacy ; legacy tags